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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/617,925	07/11/2003	Stephan Schauz	442-191	4238
23869	7590	09/27/2006	EXAMINER	
HOFFMANN & BARON, LLP 6900 JERICHO TURNPIKE SYOSSET, NY 11791			TALBOT, BRIAN K	
			ART UNIT	PAPER NUMBER
			1762	

DATE MAILED: 09/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/617,925

Applicant(s)

SCHAUZ, STEPHAN

Examiner

Brian K. Talbot

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) 1-4 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 5-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

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1. Applicant's election without traverse of Group II, claims 5-7, in the reply filed on 7/17/06 is acknowledged. Claims 1-4 are withdrawn from prosecution as being drawn to a different invention and should be canceled in response to this Office Action.

### ***Specification***

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Only methods for producing an injected molded conductor are presently active in the application. Claims directed toward an injected molded conductor have been withdrawn.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 5-7 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to claim 5, the phrase "metallized layer is deposited simultaneously" is vague and indefinite. The Examiner questions how the metallization is performed

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simultaneously as the specification recites electroplating following laser activation?

Clarification is requested.

Regarding claim 6, the phrase "or the like" renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "or the like"), thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d).

With respect to claim 7, the terms "PA66-GF, PC/ABS, LCP, PA6/6TMID, PBTMID and PPMID" are vague and indefinite.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 01/97583, GB 2193847 or GB 2266410 in combination with Huske et al., "Laser Supported Activation and Additive Metallization of Thermoplastics for 3D-MIDS".

WO 01/97583 teaches a molded electronic assembly comprises a first molded plastic portion including a component mounting plane and a plurality of non-coplanar surfaces, a second molded plastic portion molded around the first molded plastic portion and including openings therein defining selected regions of the first molded plastic portion, metallization applied to the

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selected regions of the first molded plastic portion defining a network of electrically conductive traces and conductive regions providing electrical continuity over at least two of the non-coplanar surfaces. One of the first and second molded plastic portions is formed from a platable plastic material. Preferably, the first molded plastic portion is formed from a glass-filled high temperature thermoplastic loaded with conductive filler material. The second molded plastic portion is preferably formed from a glass-filled high temperature thermoplastic.

GB 2193847 teaches a molded one-piece article formed by molding into a first mold cavity a first portion of the article using an insulating material capable of being adhesion promoted by an adhesion promoting process and is catalytic for adherent metallization, inserting the first molded portion into a second molded cavity and molding and molding into a second cavity a second portion of the article using an insulating material leaving surfaces of the first molded body exposed. The second insulating material is resistant to adhesion promotion. Electroless metal plating is then performed on the exposed first body (abstract). The adhesion promoting process is contacting the molded body with an oxidizer or solvent (lines 85-90).

GB 2266410 teaches fitting together a first and second injection molded member, member (1) being capable of being plated. The first injection molded member has conductor patterns formed thereon. The second injection molded member has substantially the same shape and profile as the first molded member except complimentary portion. The integral member is completed by forming conductor patterns on the complimentary portions by a plating process. (abstract).

WO 01/97583, GB 2193847 or GB 2266410 fail to teach laser beam activation prior to metallization of the substrate.

Huske et al., "Laser Supported Activation and Additive Metallization of Thermoplastics for 3D-MIDS" teaches a thermoplastic part having been injection molded the surface of the thermoplastic part is then partially activated by laser irradiation prior to an electroplating process to form the circuit tracks selectively deposited on these activated areas.

Therefore it would have been obvious for one skilled in the art at the time the invention was made to have modified WO 01/97583, GB 2193847 or GB 2266410 process by incorporating a laser activation pretreatment prior to metallization as evidenced by Huske et al., "Laser Supported Activation and Additive Metallization of Thermoplastics for 3D-MIDS" because of the advantages associated therewith, i.e. increase adhesion between the metallized layer and the substrate due to the laser activation.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian K. Talbot whose telephone number is (571) 272-1428. The examiner can normally be reached on Monday-Friday 6AM-3PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy H. Meeks can be reached on (571) 272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

*B K Talbot* 9/22/06

Brian K Talbot  
Primary Examiner  
Art Unit 1762

BKT